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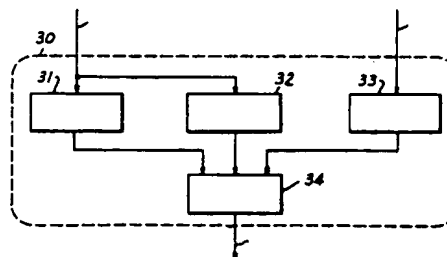
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**Leigh on Sea Essex SS9 1BN(GB)**(54) **A signal quality detecting circuit for FM receivers.**

(57) A signal quality detecting circuit for an FM receiver, said receiver including an IF detector generating an intensity signal indicating the received field strength of the FM signal being received and including an FM demodulator generating an automatic frequency control signal indicating a frequency error at which said FM signal is being received, said signal quality detecting circuit comprising, level detector means (32) adapted to be coupled to said IF detector for producing a first signal when said intensity signal is greater than a predetermined intensity, window detector means (33) adapted to be coupled to said FM demodulator for producing a second signal when said automatic frequency control signal is within a predetermined window, noise filter means (31) adapted to be coupled to said IF detector for generating a filtered noise signal derived from said intensity signal, said filter means rejecting frequencies containing components related to the intelligence contained in said FM signal, peak detector means (31) coupled to said noise filter means for producing a third signal when said filtered noise

signal is below a predetermined peak value, and logic means coupled to said level detector means, said window detector means, and said peak detector means for producing an indicating signal (35) in response to the simultaneous occurrence of said first, second, and third signals to indicate that a high quality FM signal is being received.

**FIG.3**



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## EUROPEAN SEARCH REPORT

Application Number

EP 90 31 2233

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	IEEE TRANSACTIONS ON CONSUMER ELECTRONICS. vol. CE28, no. 3, August 1982, NEW YORK US pages 383 - 392; WILE: 'advanced fm-1f' * page 383, line 18 - line 41; figures 1,5,6,7 * * page 386, line 34 - page 387, line 36 *	1,7,8	H04B1/16 H03J7/22
A	PATENT ABSTRACTS OF JAPAN vol. 8, no. 84 (E-239)(1521) 18 April 1984 & JP-A-59 005 730 ( MITSUBISHI DENKI K.K ) * abstract *	1,7,8	
A	US-A-3 934 206 (HOLECEK)  * column 2, line 21 - line 47; figure * * abstract *	1,2,5,6, 7,11	
A	US-A-4 293 736 (OGITA) * column 1, line 16 - line 37 * * column 4, line 32 - line 37 *	3	
A	US-A-4 087 641 (SUGAI) * column 1, line 6 - line 43 *	9,10	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
A	EP-A-0 335 141 (BLAU-PUNKT GMBH) * claims 1,2 *	1,7,11	H04B H03J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17 MARCH 1992	Examiner GOULDING C.A.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	